

UNITED STATES PATENT AND TRADEMARK OFFICE



| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|----------------------------------|-----------------|----------------------|-------------------------|------------------|
| 09/691,352 | 10/18/2000 | Duane M. Pinault | 55126USA3A.002 | 3971 |
| 32692 | 7590 01/23/2003 | | | |
| 3M INNOVATIVE PROPERTIES COMPANY | | | EXAMINER | |
| PO BOX 33427 | | | NORDMEYER, PATRICIA L | |
| ST. PAUL, M | IN 55133-3427 | | | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1772 | $\overline{}$ |
| | | | DATE MAILED: 01/23/2003 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | AS- T | | | | |
|--|--|---|--|--|--|--|
| , | Application No. | Applicant(s) | | | | |
| • | 09/691,352 | PINAULT ET AL. | | | | |
| Office Action Summary | Examin r | Art Unit | | | | |
| | Patricia L. Nordmeyer | 1772 | | | | |
| The MAILING DATE of this communication appears on the cover sh et with the correspond nc address Period for Reply | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a rep - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statut - Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b). Status | 136(a). In no event, however, may a reply be oly within the statutory minimum of thirty (30) d will apply and will expire SIX (6) MONTHS fro e. cause the application to become ABANDON | timely filed ays will be considered timely. m the mailing date of this communication. IED (35 U.S.C. § 133). | | | | |
| 1) Responsive to communication(s) filed on <u>02</u> | December 2002 . | | | | | |
| 2a) ☐ This action is FINAL . 2b) ☑ TI | his action is non-final. | | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the ments is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims | | | | | | |
| 4) Claim(s) 1-38 is/are pending in the application. | | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| 6)⊠ Claim(s) <u>1-19,26-31 and 35-38</u> is/are rejected | 1. | | | | | |
| 7)☐ Claim(s) is/are objected to. | • | | | | | |
| 8)⊠ Claim(s) <u>20-25 and 32-34</u> are subject to restriction and/or election requirement. | | | | | | |
| Application Papers | | | | | | |
| 9) The specification is objected to by the Examiner. | | | | | | |
| 10)☐ The drawing(s) filed on is/are: a)☐ acce | epted or b) objected to by the Ex | aminer. | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| 11)☐ The proposed drawing correction filed on | _ is: a)□ approved b)□ disapp | roved by the Examiner. | | | | |
| If approved, corrected drawings are required in reply to this Office action. | | | | | | |
| 12) The oath or declaration is objected to by the Examiner. | | | | | | |
| Priority under 35 U.S.C. §§ 119 and 120 | | | | | | |
| 13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | |
| a) ☐ All b) ☐ Some * c) ☐ None of: | | | | | | |
| 1. Certified copies of the priority documents have been received. | | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). | | | | | | |
| | | | | | | |
| a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. | | | | | | |
| Attachment(s) | _ | | | | | |
| Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449) Paper No(s) | 5) Notice of Inform | ary (PTO-413) Paper No(s) al Patent Application (PTO-152) | | | | |

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DETAILED ACTION

Repeated Rejections

1. The 35 U.S.C. 112 rejection of claims 8 and 9 is repeated for the reasons previously of record in Paper #5, Page 3, Paragraph 8.

Claims 8 and 9 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. It is unclear from the specification what the coordinates L*, a* and b* stands a intensity or brightness or color when using the HunterLab color scale. No explanation is given in the specification.

2. The 35 U.S.C. 102 rejection of claims 1, 3, 4, 6, 7, 10 – 13, 16 – 18, 26, 27, 30, 31, and 35 is repeated for the reasons previously of record in Paper #5, Page 4, Paragraph 12.

Tsuei discloses an article with a plurality of ceramic granules (Column 11, lines 47 - 51 and Figure 1, #16) bonded to a polymeric film (Column 11, lines 28 - 30 and Figure 1, #11) by a radiation curable (Column 4, lines 41 - 44) aliphatic urethane acrylic copolymer (Column 4, lines 30 - 31). A variety of items may be added to the curable coating including pigments, dyes, ultraviolet absorbers, ultraviolet scavengers, fillers and adhesion promoters (Column 7, lines 26 - 37). In order to improve adhesion to the coatings, the film may be primed (Column 11, lines

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43 - 45). The article may also be formed from a free-standing coating with a layer of adhesive to attach particles to the surface (Column 12, lines 26 - 45). A size coating, sealant, of varying thickness is placed over the particles, completely covering some of the particles, and adhesive layer to help bond the particles to the film (Column 10, lines 39 - 59). The article may be used as a floor covering (Column 9, lines 59 - 64).

3. The 35 U.S.C. 103 rejection of claims 2, 5, 8, 9, 14, 15 and 19 is repeated for the reasons previously of record in Paper #5, Pages 5 and 6, Paragraph 14.

Tsuei discloses a product with white ceramic granules (Column 11, line 52) adhered to a film with transparent adhesive (Column 10, lines 63 - 65) that was tested for flexibility, pliability, (Column 25, lines 14 - 24) and had a tensile elongation of 112% (Column 25, lines 37 - 40).

Regarding determining the pliability of the product by mandrel flexibility test procedures according to ASTM D-228-00, the flexibility tested according to ASTM D-882.97, the aesthetic color being changed as indicated by one unit or more of change in an HunterLab color coordinates of L*, a* or b* and the product exhibiting a value of 64 or greater for L* according to HunterLab spectrocolorimeter test procedures in claims 2, 5, 8, 9, 14, 15 and 19, the determination of patentability for a product-by-process claim is based on the product itself and not on the method of production. If the product in the product-by-process claim is the same or obvious from a product of the prior art, the claim is unpatentable even though the prior product

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was made by a different process. *In re Thorpe*, 227 USPQ 946, 966 (Fed. Cir. 1985) and MPEP §2113. In this case, the limitation of using ASTM D-228-00, ASTM D-882.97 and HunterLab color coordinates and spectrocolorimeter test procedures is a method of production and therefore does not determine the patentability of the product itself. Process limitations are given little or no patentable weight. The method of forming the product is not germane to the issue of patentability of the product itself. Further, when the prior art discloses a product which reasonably appears to be either identical with or only slightly different than a product claim in a product-by-process claim, the burden is on the Applicant to present evidence from which the Examiner could reasonably conclude that the claimed product differs in kind from those of the prior art. *In re Brown*, 459 F.2d 531, 173 USPQ 685 (CCPA 1972); *In re Fessman*, 489 F.2d 742, 180 USPQ 324 (CCPA 1974).

Withdrawn Rejections

- 4. The 35 U.S.C. 112 rejection of claims 2, 5, 14, 15 and 19 of record in Paper #5, Page 3, Paragraphs 8 10 have been withdrawn due to Applicant's arguments in Paper #6.
- 5. The 35 U.S.C. 103 rejection of claims 1, 28 and 29 of record in Paper #5, Pages 6 and 7, Paragraph 15 have been withdrawn due to Applicant's arguments in Paper #6.

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New Rejections

Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 1, 26, 28, 29 and 36 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuei in view of George et al. (USPN 5,516,573).

Tsuei discloses an article with a plurality of ceramic granules (Column 11, lines 47 – 51 and Figure 1, #16) bonded to a polymeric film (Column 11, lines 28 – 30 and Figure 1, #11) by a radiation curable (Column 4, lines 41 – 44) aliphatic urethane acrylic copolymer (Column 4, lines 30 – 31). A variety of items may be added to the curable coating including pigments, dyes, ultraviolet absorbers, ultraviolet scavengers, fillers and adhesion promoters (Column 7, lines 26 – 37). In order to improve adhesion to the coatings, the film may be primed (Column 11, lines 43 – 45). The article may also be formed from a free-standing coating with a layer of adhesive to attach particles to the surface (Column 12, lines 26 – 45). A size coating, sealant, of varying thickness is placed over the particles, completely covering some of the particles, and adhesive layer to help bond the particles to the film (Column 10, lines 39 – 59). The article may be used as a floor covering (Column 9, lines 59 – 64). However, Tsuei fails to disclose the article being a roofing shingle or a roll of roofing material, the tensile strength according to American Roofing Manufacture Association Test Index No. 2,126 of greater than 50% over a shingle without said

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integrated granule product, the substrate being an asphalt-based substrate and the integrated granule product forms an exposed layer of roofing material.

George et al. teaches ceramic-coated granules (Column 3, lines 8-12) on the surface asphalt based substrate (Column 4, lines 20-21) of a roofing material (Figure 3, #63 and Column 2, lines 46-47) wherein the roofing material includes roof shingles with exposed surfaces (Column 1, line 11 and lines 39-42) for the purpose of giving protection against exposure from ultraviolet light and improve fire resistance and weather characteristics.

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have provided asphalt as the substrate in a roofing material in a shingle in order to give protection against exposure from ultraviolet light and improve fire resistance and weather characteristics as taught by George et al. since Tsuei already contained a type of gritted material adhered to a substrate.

Regarding claim 29, since Tsuei in view of George et al. discloses the same materials, a polymeric film and hot melt adhesive, as desired by the applicant, it is inherent that the roof shingle exhibits a tensile strength of greater than 50% over a shingle without the integrated granule product according to American Roofing Manufacturers Association Test Index No. 2,126.

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Response to Arguments

8. Applicant's arguments filed in Paper #6 regarding the 35 U.S.C. 112 rejection of claims 8 and 9 have been fully considered but they are not persuasive.

The Examiner appreciates the explanation of the HunterLab coordinates included with the response; however, the Examiner is unclear if the X, Y and Z values in the equations are know values or values from collected data, and therefore, does not know how to make a comparison between the Applicant's values and referenced art. Since Tsuei meets the limitations of the claims, the coordinates are inherent.

Applicant's arguments filed in Paper #6 regarding the 35 U.S.C. 102 rejection of claims 1, 3, 4, 6, 7, 10 - 13, 16 - 18, 26, 27, 30, 31, and 35 as anticipated by Tsuei have been fully considered but they are not persuasive.

In response to Applicant's arguments that Tsuei fails to teach or suggest ceramic coated granules, Tsuei teaches solid ceramic granules. The solid granules are performing an equivalent function to the Applicant's ceramic coated granules, unforeseen of any unexpected results from the coated ceramic granules. If unexpected results are present from having the coated granules, these results need to be presented to show that the granules are not equivalent functions.

10. Applicant's arguments filed in Paper #6 regarding the 35 U.S.C. 103 rejection of claims 2, 5, 8, 9, 14, 15 and 19 over Tsuei have been fully considered but they are not persuasive.

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In response to Applicant's arguments that Tsuei fails to teach or suggest ceramic coated granules, Tsuei teaches solid ceramic granules. The solid granules are performing an equivalent function to the Applicant's ceramic coated granules, unforeseen of any unexpected results from the coated ceramic granules. If unexpected results are present from having the coated granules, these results need to be presented to show that the granules are not equivalent functions.

Applicant's arguments with respect to claims 1, 28 and 29 rejected over Zickell in view of 11. George et al. have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patricia L. Nordmeyer whose telephone number is (703) 306-5480. The examiner can normally be reached on Mon.-Thurs. from 7:00-4:30 & alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Y. Pyon can be reached on (703) 308-4251. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

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Patricia L. Nordmeyer Examiner Art Unit 1772

January 15, 2003